



COUNTY OF LOS ANGELES

CHIEF INFORMATION OFFICE

500 WEST TEMPLE STREET
493 HALL OF ADMINISTRATION
LOS ANGELES, CALIFORNIA 90012

JON W. FULLINWIDER
CHIEF INFORMATION OFFICER

TELEPHONE: (213) 974-2008
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April 8, 2003

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, California 90012

Dear Supervisors:

**APPROPRIATION ADJUSTMENT FOR THE COUNTYWIDE
BUSINESS CONTINUITY PROGRAM
(3 VOTES)**

IT IS RECOMMENDED THAT YOUR BOARD:

Approve an appropriation adjustment (Attachment A) to transfer \$400,000 from the Chief Information Office's (CIO) Operating Budget to the Information Technology Fund (ITF) as designated funding for the Countywide Business Continuity Program (BCP).

PURPOSE OF RECOMMENDED ACTION

On March 4, 2003, your Board approved moving forward with the BCP Program. The purpose of this action is to move one-time funding of \$400,000 from the CIO's Operating Budget within the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Security Program to the ITF. The funding designates monies to commence the initial phase, including retaining a consultant to assist in the development of a formal framework to document and maintain the BCP, and to acquire BCP software tools.

Implementation of Strategic Plan Goals

The BCP project supports the County's Strategic Plan Goal No. 3 – Organizational Effectiveness – to ensure that service delivery systems are efficient, effective, goal-oriented, and available. The BCP also supports Strategic Plan Goal No. 4 – Fiscal Responsibility – by ensuring sufficient funding to implement a countywide program.

JUSTIFICATION

In a February 18, 2003 report released by this office documenting results of the BCP feasibility study, we proposed several actions for your approval. Upon discussion and review of the report in your February 25, 2003 meeting, your Board approved actions that directed each County Department/District Head to participate in the development of their component of the Countywide BCP and to test the validity of the plan on an annual basis. The motion also ordered establishment of a BCP Steering Committee, chaired by the Chief Administrative Office/Office of Emergency Management (CAO/OEM) with support from the CIO, Internal Services Department (ISD) and the Auditor-Controller (A-C), to oversee the development, implementation and maintenance of the program.

In the February 25, 2003 meeting, your Board also directed this office to present the BCP background and study findings in the March 4, 2003 meeting. Subsequent to that presentation, the following actions were taken by your Board:

- Approved the acquisition or internal development of software for the management and maintenance of departmental plans;
- Authorized the CIO to secure a consultant to help develop the framework for documenting and maintaining the BCP; and
- Authorized the use of \$400,000 in identified ITF money for the acquisition or internal development of software and consulting services to initiate the BCP.

Your Board also instructed the CIO, CAO/EOC, ISD and A-C, to give a report in two weeks on the following issues:

- Clarify the actions required by departments to complete a BCP assessment and implement their plans;
- Provide examples of the tasks and deliverables to be completed by the consultant;
- Identify the type of software to be purchased; and
- Describe how the BCP program will be coordinated.

On March 18, 2003, this office submitted a memorandum that addressed the above issues (Attachment B).

The CIO has identified project funding within its FY 2002-2003 operating budget to support funding the BCP. This approach makes available adequate resources to implement the BCP action plan while retaining ITF resources for use on other web development and information technology projects.

FISCAL IMPACT/FINANCING

Subject to your approval, the CIO will transfer \$400,000 in funding from its operating budget to the ITF. The CIO will allocate one-time FY 2002–2003 budgetary funding from its HIPAA Security Program, and transfer a portion of that funding to the ITF towards implementing the initial phase of the Countywide BCP.

This transfer ensures that adequate reserves are in place to support the BCP. In addition, given the limited availability of funding within the ITF, transferring the funds for the BCP will help to maintain the fund balance for future web development and other department information technology (I/T) projects.

There is no other fiscal impact.

FACTS AND PROVISIONAL/LEGAL REQUIREMENT

On July 2, 2002, your Board identified the need for a comprehensive BCP Program and directed this office, along with the CAO/OEM, ISD, and the A-C, to provide scope, time and cost estimates for a Countywide BCP. The County's Cyber-Terrorism Working Group and A-C reports also identified the need for a BCP.

In addition, proposed regulatory requirements under HIPAA call for the development of business continuity/disaster recovery plans.

Per County Purchasing guidelines, we will submit any required Board contracts for your review.

IMPACT OF CURRENT SERVICES

The impact of developing a comprehensive BCP program was discussed in our February 18, 2003 report, *Business Continuity Program Feasibility Study* (Attachment C). Further information was provided to your Board in our March 4, 2003 presentation on the background, findings and recommendations contained in the Business Continuity Program Feasibility Study.

CONCLUSION

Your Board's approval of the recommended actions authorizes designation of the BCP as an ITF project and authorizes a budgetary transfer of \$400,000 to fund the program.

Respectfully submitted,



JON W. FULLINWIDER
Chief Information Officer

JWF:JEW
YD:ygd

Attachments (3)

- c: Chief Administrative Officer
Interim Director, Internal Services Department
Auditor-Controller
Board I/T Deputies
Chair, Information Systems Commission
Manager, Chief Administrative Office/Office of Emergency Management
ITF Project File

COUNTY OF LOS ANGELES
REQUEST FOR APPROPRIATION ADJUSTMENTDEPT'S.
No.

080

DEPARTMENT OF Chief Information Office

March 2003

AUDITOR-CONTROLLER.

THE FOLLOWING APPROPRIATION ADJUSTMENT IS DEEMED NECESSARY BY THIS DEPARTMENT. WILL YOU PLEASE REPORT AS TO ACCOUNTING AND AVAILABLE BALANCES AND FORWARD TO THE CHIEF ADMINISTRATIVE OFFICER FOR HIS RECOMMENDATION OR ACTION.

ADJUSTMENT REQUESTED AND REASONS THEREFOR

3 ~~✱~~ VOTE B-A.

APPROPRIATION ADJUSTMENT

SOURCESChief Information Office
Services & Supplies
A01-IO-10070-2000
\$400,000Information Technology Fund
Operating Transfer- In
B16-IO-40033-9911
\$400,000USESChief Information Office
Operating Transfers Out
A01 ~~B16~~-IO-~~40033~~-6100
\$400,000 ~~10070~~Information Technology Fund
Services & Supplies
B16-IO-40033-2000
\$400,000JUSTIFICATION

This appropriation adjustment transfers funding from the Chief Information Office's Operating Budget to the Information Technology Fund to support the Business Continuity Program project.

Y. De la Cruz 3/12/03

CHIEF ADMINISTRATIVE OFFICER'S REPORT

REFERRED TO THE CHIEF
ADMINISTRATIVE OFFICER FOR—

ACTION

APPROVED AS REQUESTED ✓

AS REVISED

✓ RECOMMENDATION

March 26 2003

Robert J. March
CHIEF ADMINISTRATIVE OFFICER

AUDITOR-CONTROLLER

BY

*Connie*APPROVED (AS REVISED):
BOARD OF SUPERVISORS

19

No. 178

MARCH 12 2003

BY

DEPUTY COUNTY CLERK

SEND 6 COPIES TO THE AUDITOR-CONTROLLER



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JON W. FULLINWIDER
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March 18, 2003

To: Supervisor Yvonne Brathwaite Burke, Chair
Supervisor Don Knabe, Chair Pro Tem
Supervisor Gloria Molina
Supervisor Zev Yaroslavsky
Supervisor Michael D. Antonovich

From: Jon W. Fullinwider
Chief Information Officer

Subject: **BUSINESS CONTINUITY PLANNING PROGRAM QUESTIONS**

This memorandum is in response to questions raised by Supervisor Molina at the March 4, 2003, Board meeting regarding the County's Business Continuity Planning (BCP) Program. The responses have jointly been developed and reviewed by the Chief Administrative Office/Office of Emergency Management (CAO/OEM), the Auditor-Controller (A-C), and Internal Services Department (ISD).

Background

BCP provides a formal process to deal with the loss of critical services, facilities, resources, or operational processes in the event of an unexpected outage or significant disruptive event. At its core is a framework providing structure for the identification and compilation of departmental information allowing for the planned recovery of critical services. When fully implemented, BCP will compliment the County's existing emergency operations plan(s), providing departmental and countywide visibility into the scope and actions required to identify and restore critical services during an extended disruptive event.

It is important to note that BCP is a business process and not a one time event. Business continuity plans must be updated, validated and tested on an annual basis. As business processes change or new services are added/modified, BCP plans must be modified to reflect the operational changes as the change occurs.

BCP Questions

The following are specific responses to Board questions:

Q. What are the actions required by departments to complete a Business Continuity Plan (BCP) framework and to implement their BCP plans?

- A. Completing and Implementing BCP Plans – The BCP framework is a structured methodology that defines the steps, processes and deliverables necessary to develop and implement departmental business continuity plans. Once the BCP framework has been developed and validated, each department will be held responsible for using the framework during the development of their respective BCP plans. The plans will reflect critical services, required recovery times, required resources, technology requirements and detailed plans/actions for the recovery of services in the event the plans have to be executed.

The following chart identifies examples of actions that departments will be required to perform in order to develop and implement their business continuity plans.

EXAMPLES OF DEPARTMENTAL BCP ACTIONS

IDENTIFY	DEVELOP	IMPLEMENT	MAINTAIN/TEST
<ul style="list-style-type: none"> Identify and document critical time-sensitive services and processes. 	<ul style="list-style-type: none"> Develop alternative strategies for resumption and recovery of time-sensitive services and processes. 	<ul style="list-style-type: none"> Develop business continuity plan based on the selected business continuity strategies. The plan would document actions required to execute resumption and recovery operations effectively. 	<ul style="list-style-type: none"> Establish a plan exercise/test program.
<ul style="list-style-type: none"> Identify and document recovery resource requirements (e.g. people, facilities, equipment, technology, vital records, etc.). 	<ul style="list-style-type: none"> Identify implementation and ongoing costs for each alternative strategy. 	<ul style="list-style-type: none"> Establish a departmental recovery organization. 	<ul style="list-style-type: none"> Establish training requirements.
<ul style="list-style-type: none"> Identify and document critical recovery timeframes and priorities. 	<ul style="list-style-type: none"> Select business continuity strategies for time-sensitive services and processes based on level of protection and cost of maintaining capability. 	<ul style="list-style-type: none"> Define departmental BCP recovery teams and identify team tasks and procedures. 	<ul style="list-style-type: none"> Prepare and run sample exercises/tests. Evaluate plan effectiveness and make modifications if necessary.
		<ul style="list-style-type: none"> Conduct plan reviews. 	<ul style="list-style-type: none"> Define plan update and maintenance procedures.

Once departmental plans are completed, they will be reviewed by CAO/OEM to assess compliance with requirements identified in the BCP framework.

Q. What are examples of the tasks and deliverables to be completed by consultant?

- A. The development of the BCP framework will be accomplished with the assistance of a consultant engaged as a part of selecting a BCP software solution. The consultant will be engaged to modify the generalized framework provided by the selected BCP software solution based on an assessment of County requirements. The framework will provide structure and describe procedures and processes for developing departmental business continuity plans. Additionally, a glossary of terms will be provided documenting common terminology and definitions. The consultant will also assist in organizing and conducting training for departments on the BCP framework and its use within the selected software solution.

We estimate that \$400,000 in funding is required to cover the acquisition or internal development of BCP software and consulting services to assist in the development of a formal framework.

Q. What is the type of software to be purchased?

- A. The decision to purchase commercially available BCP software will expedite the development and implementation of the County's BCP program. During our analysis leading to the development of the BCP report, we reviewed two industry leading software products and subsequently met with one of the vendors to review product capabilities. In selecting a software solution, we will acquire a web-based product designed for large enterprise operations with a strong focus on framework flexibility, integration, ad-hoc reporting, resource compatible database support and collaborative planning tools.

Q. How will the BCP program be coordinated with the Departments?

- A. The CAO/OEM will coordinate the County's overall BCP Program. Under County code, CAO/OEM is presently charged with developing and maintaining response and/or recovery of County operations in times of disaster. The CAO/OEM will convene a Recovery and Business Continuity Planning Task Force to be jointly chaired by CAO/OEM and CIO. The task force will develop policies and processes to implement a countywide BCP program, using planning guidance developed by the consultant. The Emergency Management Council will provide executive oversight, and the Chief Administrative Officer will provide direction to departments to ensure the highest level of executive support.

Departments will be responsible for developing their own BCP plans. Departments will identify BCP coordinators to ensure departmental support for the BCP process. Department BCP plans will be reviewed by the Office of Emergency Management and approved by the Emergency Management Council.

Each Supervisor
March 18, 2003
Page 4

OEM, with support of the task force will develop a countywide plan, which will ensure continuity between departmental plans. This plan will identify and establish countywide recovery priorities. Also, it will identify opportunities to develop alternate recovery solutions that can be accessed by all County departments in the event of a major service disruption.

The attached chart reflects the emergency management planning responsibilities as described in the County Code. We will use this structure to coordinate the County's BCP efforts.

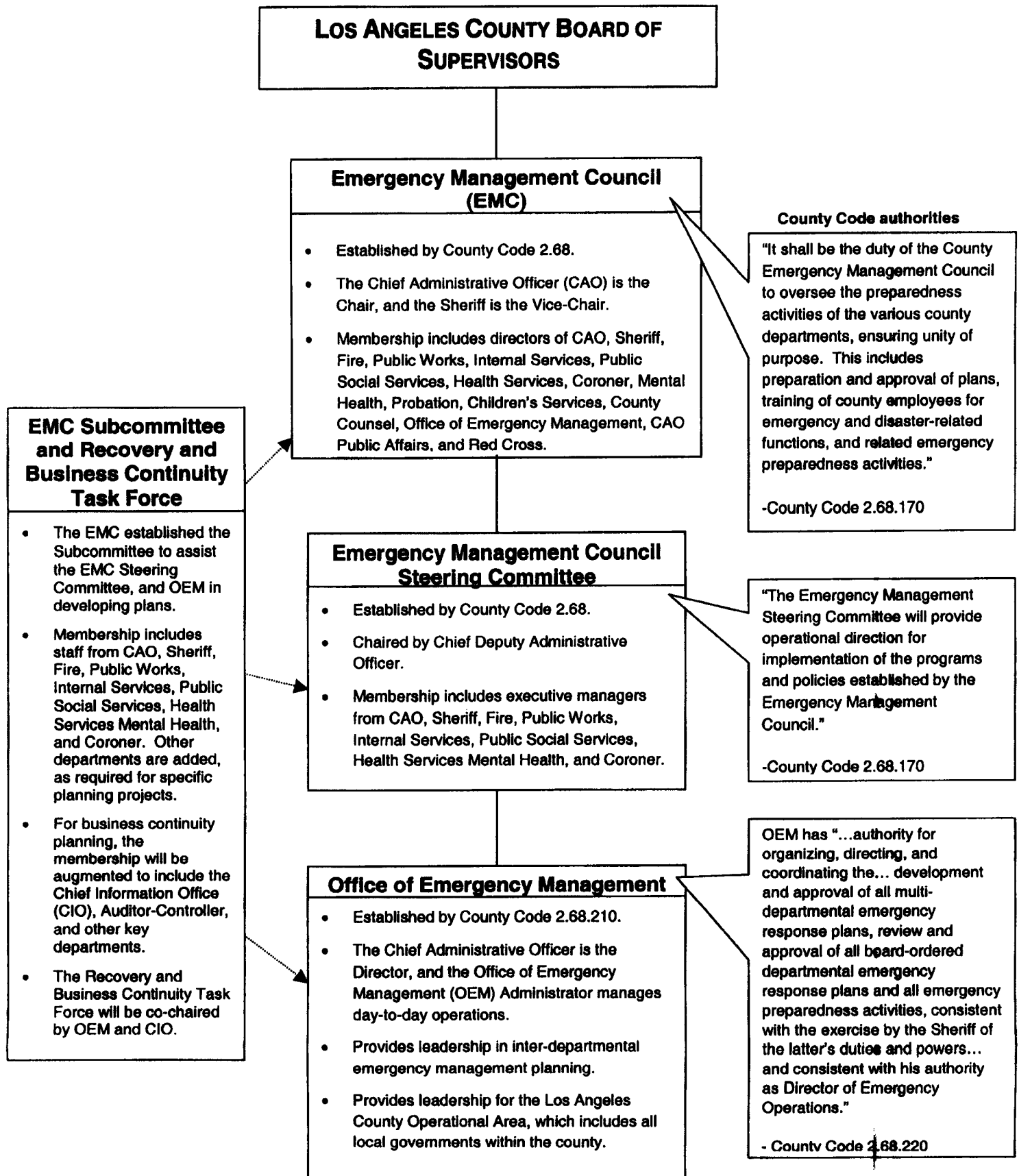
If you have questions, please contact me at (213) 974-2008, or in my absence, your staff may contact Bill Butler, CAO/OEM, at (323) 980-2258 or Gregory Melendez, of my staff, at (213) 974-1710.

JWF:JW:
GM:ygd

Attachment

c: I/T Board Deputies
Emergency Preparedness Board Deputies
Chief Administrative Officer
Chief Administrative Office/Office of Emergency Management
Executive Officer, Board of Supervisors
Director, Internal Services Department
Auditor-Controller
Chair, Information Systems Commission

Emergency Management Planning in Los Angeles County



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February 18, 2003

To: Supervisor Yvonne Brathwaite Burke, Chair
Supervisor Don Knabe, Chair Pro Tem
Supervisor Gloria Molina
Supervisor Zev Yaroslavsky
Supervisor Michael D. Antonovich

From: Jon W. Fullinwider
Chief Information Officer

David E. Janssen
Chief Administration Officer

Joan Ouderkirk, Director
Internal Services Department

J. Tyler McCauley
Auditor-Controller

Subject: **BUSINESS CONTINUITY PROGRAM FEASIBILITY STUDY**

On July 2, 2002, the Board of Supervisors (Board) directed my office, together with the Chief Administrative Office/Office of Emergency Management (CAO/OEM), Internal Services Department (ISD), and the Auditor-Controller (A-C) to prepare scope, time, and cost estimates required for development of a Countywide Business Continuity Planning (BCP) Program. Attached is a BCP Program Feasibility Study, which addresses the elements of your Board's motion and provides recommendations for moving forward.

Below is a brief summary of the background, findings, and recommendations in this report. These findings and recommendations are based on a survey of departments, review of pertinent documentation, and our analysis of industry trends and best practices. We also took into consideration the County's ability to respond to the recommendations given its current and projected fiscal condition. In this context, we sought to provide realistic, cost effective and achievable solutions leading to the restoration of critical services in the event of a significant disaster.

BACKGROUND

BCP provides a structured approach to deal with the consequences of the loss of critical services, facilities, resources, or operational processes in the event of intermittent outages or catastrophic disasters. It is a compilation of individual recovery or contingency plans, coordinated through a comprehensive management plan. Simply put, BCP describes how an organization will continue to function and provide critical services until normal facilities and resources are restored after a disruptive event.

The County is located in one of the most disaster prone areas in the United States and led the nation in federal disaster declarations in the decade of the 1990s, with nine declared disasters, including earthquakes, floods, wild fires, and civil unrest. It is located in one of the world's most seismically active areas, with a historical record of frequent disruptive earthquakes. The County's risk to these known threats coupled with the terrorist attacks on September 11, 2001, has raised awareness to the importance of developing a countywide business continuity plan.

The need for a comprehensive BCP Program has been identified by your Board as well as by the County's cyber-terrorism working group and Auditor-Controller reports. In addition, proposed regulatory requirements under the Health Insurance Portability and Accountability Act (HIPAA) of 1996 call for the development of business continuity/disaster recovery plans.

FINDINGS

Business recovery planning is currently conducted individually by each department with no coordinated effort at the countywide level. No clear recovery priorities are in place to coordinate the County and departments' recovery related activities and to guide the orderly restoration of County services and processes. As a result of these and other issues, the County may not be able to restore operations within identified recovery timeframes following a large disruption.

An analysis of the County's business continuity preparedness identified the following issues related to efforts to recover critical, time-sensitive business processes and functions following a disaster.

- **Lack of comprehensive disaster recovery and business continuity plans.** A significant number of departments had no documented plans and of those in place, the majority of respondents deemed them insufficient. Moreover, findings in audits by the A-C and KPMG LLP noted that the County lacked comprehensive plans to recover and restore critical systems in the event of a disaster.
- **Insufficient testing of existing plans.** Many departments reported that their plans were not tested regularly to ensure that recovery of services and critical data were achievable.
- **Existing plans focused only on recovery of information technology (I/T) assets.** Many plans are focused on recovery of technology assets and had not included recovery of critical programmatic and business work processes.
- **Existing disaster recovery planning is narrowly focused.** The County's disaster recovery activities have traditionally focused largely on restoration of mainframe resources

at the central data center. Critical data on midrange computing resources at the County's central data center and distributed systems hosted by departments may be largely irretrievable if facilities were destroyed, thus impairing restoration of data and services to constituents.

- **Loss of services could have significant consequences.** The loss of County services could have life and safety implications and possible legal and financial exposure if they were unavailable for a long period of time or impacted due to a major disaster.
- **Existing County emergency management planning has focused chiefly on disaster response and early recovery.** Past planning has focused on emergency response and early recovery, and has not adequately addressed recovery of County services and processes that are not essential to a disaster response. CAO/OEM has taken steps to address this weakness, but more actions need to be taken to provide coordinated business recovery of County services and processes.
- **Lack of recovery priorities and shared disaster recovery resources.** County recovery priorities were developed after the Northridge Earthquake for prioritization of building inspections and reconstruction, however, the County lacks clear recovery priorities to ensure the orderly restoration of services that complicates recovery from a disaster. Also, no shared disaster recovery resources (e.g., alternate work locations, alternate I/T sites, off-site storage) are available to assist department recovery efforts.
- **The County's exposure to potential threats is increasing.** The September 11, 2001, terrorist attacks demonstrated how vulnerable organizations can be even to the most unthinkable events.
- **Regulatory mandates will necessitate a commitment to BCP.** Proposed HIPAA security regulations will mandate a commitment to BCP.

Of interest in reviewing departmental plans was their focus on recovery of I/T related assets, however, there was no relationship to the identification or resumption of services. While I/T may be important, it is only an enabler for the delivery of services. The concept of a service centric BCP is a critical redefinition of how the County responds in the event of a significant/extended outage.

RECOMMENDATIONS

A single major event can jeopardize the delivery of critical services to the County's residents. Recognizing the need to continue delivery of these services, the County must establish a Countywide BCP Program to provide for the identification and timely restoration of critical services in the event of catastrophic disaster.

While we undertook efforts identifying costs to hire a consulting firm to assist in coordinating and implementing a comprehensive BCP program, we are recommending an internally staffed effort using only selective consultative assistance to augment current County expertise. This approach will ensure that BCP becomes a department responsibility and that plans are developed and in place that will enable the recovery of critical services within established timeframes.

As the County moves forward to implement a BCP Program, it must have a strong commitment and support from the Board and County executive management. Additionally, an established organizational structure must be put in place to implement and maintain the BCP Program. This organization structure would build on the County's existing emergency management organization.

The following are recommended initial actions that the County should take to implement an effective Countywide BCP program.

- Direct each department to participate in the development of their component of a Countywide BCP Program. Further, it is recommended that once the BCP is developed, it should be tested and validated annually.
- Establish a County BCP Steering Committee to oversee the development, implementation and maintenance of the program. The BCP Committee would be chaired by CAO/OEM with support from the CIO, ISD and A-C.
- Approve the acquisition or internal development of software to facilitate the management and maintenance of departmental plans. This will allow for improved visibility leading to the identification and maximization of potential shared resources.
- Secure a consultant to assist in the development of a formal framework for documenting and maintaining a department and Countywide BCP Program.

FISCAL IMPACT

We estimate that \$400,000 in funding is required to cover the acquisition or internal development of BCP software and consulting services to assist in the development of a formal framework. The acquisition of BCP software tools and the recommended consulting engagement will require a separate solicitation or procurement apart from the BCP Request for Information (RFI) discussed in this report. The RFI was issued solely for informational and planning purposes.

This initiative will be funded with budgeted appropriation for County information security or the Information Technology Fund (ITF). The expenditure of ITF funds in amounts greater than \$100,000 requires formal approval by the Board. It should be noted that there might be additional costs as technology-based infrastructure is identified to support the actual implementation of BCP recovery solutions.

We anticipate that approximately two months is required to obtain a consultant to assist in the development of a workable BCP framework and between four to six months to acquire or develop a software solution for the management and maintenance of departmental BCP data. For planning purposes, we project the implementation of a Countywide BCP Program within 18 months. However, testing, validation, and refinement of plans will be an ongoing task.

**Each Supervisor
February 18, 2003
Page 5**

If you have questions, please contact Jon Fullinwider, CIO, at (213) 974-2008, or in his absence, your staff can contact Bill Butler, CAO/OEM, at (323) 980-2258 or Gregory Melendez, of the CIO, at (213) 974-1710.

JWF:JW:GM:ygd

Attachment

**c: Sharon Harper, Chief Deputy, CAO
Constance Perett, Administrator, CAO/OEM
Chair, Information Systems Commission
BCP Program Working Group**

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